3 Industry



Structure

The EU-27's industrial economy covers: mining and quarrying; manufacturing; electricity, gas, steam and air conditioning supply; and water supply, sewerage, waste management and remediation activities. Manufacturing was by far the largest of these four activities. In 2018, this sector accounted for 85 % of industrial value added and for 90 % of industrial employment in the EU-27.

Concentration of industrial activity — top five EU Member States

(% share of EU-27 employment and value added for each activity, 2018)

EU-27
industry in 2018

2.3 million enterprises

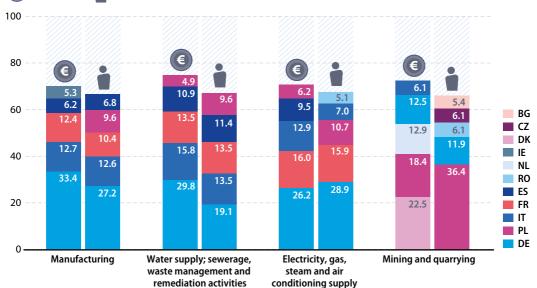
33.1 million
persons employed
EUR 2.3 trillion
value added

In 2018, Germany had the highest share of EU-27 value added for the manufacturing sector (33.4 %), for water supply, sewerage, waste management and remediation activities (29.8 %) and for electricity, gas, steam and air conditioning supply (26.2 %). By contrast, Denmark contributed the largest share of value added to the EU-27's mining and quarrying sector (22.5 %).

Germany also recorded the highest shares of EU-27 employment for the same three industrial activities as noted above, with shares of 27.2 %, 19.1 % and 28.9 % respectively. Poland had the largest employment share within the EU-27's mining and quarrying sector, at 36.4 %.

Note: electricity, gas, steam and air conditioning supply, IE and MT, not available. Water supply, sewerage, waste management and remediation activities: MT, not available.

Value added Employment Source: Eurostat (online data code: sbs_na_ind_r2)



Value added specialisation top five EU Member States

(% share of industrial value added, 2018)

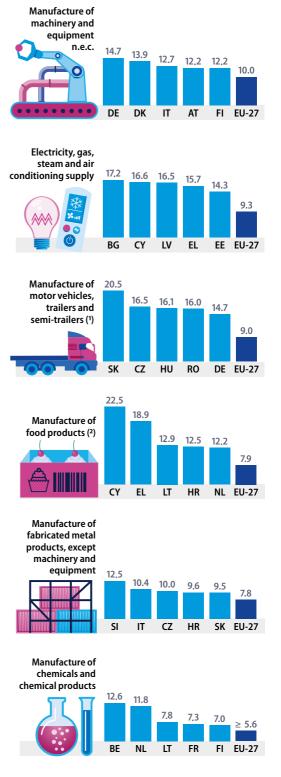
In 2018, measured by value added the six largest activities (based on NACE divisions) within the EU-27's industrial economy were: the manufacture of machinery and equipment not elsewhere classified (10.0 % of industrial value added); electricity, gas, steam and air conditioning supply (9.3 %); the manufacture of motor vehicles, trailers and semi-trailers (9.0 %), the manufacture of food products (7.9 %), the manufacture of fabricated metal products, except machinery and equipment (7.8 %); and the manufacture of chemicals and chemical products (at least 5.6 %; excluding the share for Ireland).

Among the EU Member States, Germany had the highest share of its industrial value added within the manufacture of machinery and equipment (14.7 %). For electricity, gas, steam and air conditioning, Bulgaria (17.2 %) had the highest proportion, while for the manufacture of motor vehicles, trailers and semi-trailers, the highest share was recorded in Slovakia (20.5 %).

In Cyprus, the manufacture of food products accounted for 22.5 % of industrial value added in 2018. In Slovenia, the manufacture of fabricated metal products except machinery and equipment accounted for 12.5 % of industrial value added. Belgium had the highest degree of relative specialisation across the EU Member States for the manufacture of chemicals and chemical products, with 12.6 % of its industrial value added being generated in this subsector.

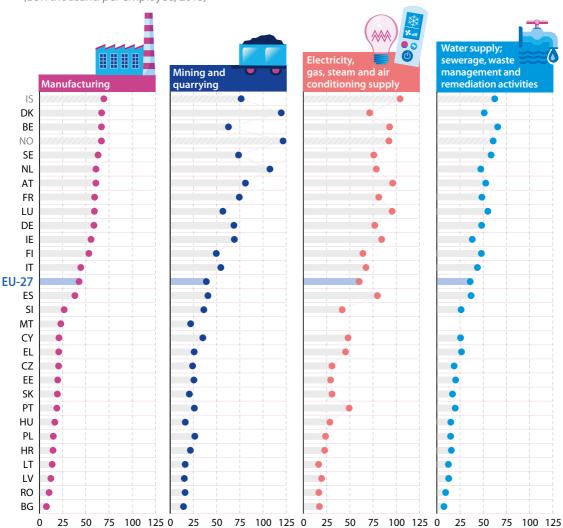
Note: data are shown for the six largest industries based on EU-27 value added for NACE Rev. 2 industrial divisions. IE and MT: not available. (1) LU: not available. (2) FR: not available.

Source: Eurostat (online data code: sbs_na_1a_se_r2)



Average personnel costs within industrial sections

(EUR thousand per employee, 2018)



In 2018, average personnel costs across the four sections within the EU-27's industrial economy ranged from a high of EUR 60.1 thousand per employee for electricity, gas, steam and air conditioning supply down to EUR 36.0 thousand per employee for water supply, sewerage, waste management and remediation activities.

In the vast majority of EU Member States, the highest average personnel costs

across industrial activities were registered for electricity, gas, steam and air conditioning supply. The only exceptions in 2018 were Denmark, the Netherlands and Poland (incomplete data for Malta): in all three cases, average personnel costs were higher for mining and quarrying. By contrast, the lowest average personnel costs were often recorded for water supply, sewerage, waste management and remediation activities.

Note: ranked on average personnel costs for manufacturing. Mining and quarrying: CY, 2015. Electricity, gas, steam and air conditioning supply: IE, 2016; CY, 2015; MT, not available. Water supply, sewerage, waste management and remediation activities: MT, not available. IS: 2017.

Source: Eurostat (online data code: sbs_na_ind_r2)

Developments

Industrial production index

(2005 = 100, EU-27, 2005-2020)



- Total
- Non-durable consumer goods
- Capital goods
- Intermediate goods
- Durable consumer goods
- Energy

Note: the index covers NACE Rev. 2 Sections B

Source: Eurostat (online data code: sts_inpr_a)

The industrial production index is an important indicator for monitoring the business cycle; it is a volume index that reflects real changes in industrial output.

Industrial output in the EU-27 contracted sharply in 2008 and 2009 as a result of the recession associated with the global financial and economic crisis. Output declined by 1.7 % in 2008 (compared with a year before) and by as much as 14.3 % in 2009; after two years of recovery there were also modest decreases in 2012 and 2013 before industrial output in the EU-27 resumed its upward trajectory. Having grown for five consecutive years, there was a 0.8 % decline for the EU-27's industrial production index in 2019, followed by a decline of 8.0 % in 2020 reflecting the impact of the COVID-19 pandemic. This most recent decline was driven by falling output for all types of manufacturing, most notably for capital goods (-12.9 % in 2020).

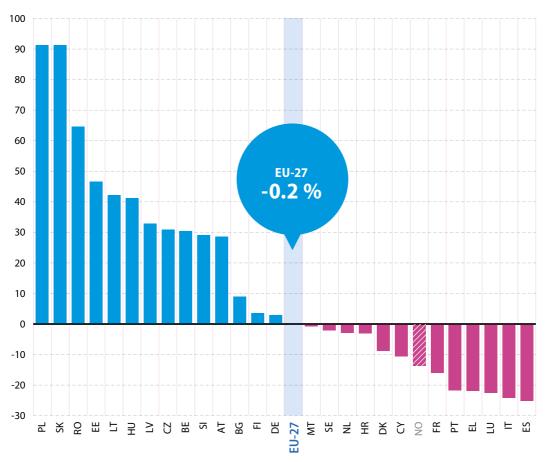
When considering the information shown in the figures on pages 28 and 29 it should be remembered that the period covered (2005-2020) includes the global financial and economic crisis and subsequent recovery. Furthermore, by ending in 2020, the overall rates of change reflect the combination of the longterm developments and the often substantial (downward) impact of the COVID-19 pandemic on the results for 2020.

Overall change in the industrial production index

(%, 2005-2020)

EU-27 industrial production was at a similar level in 2020 as in 2005, down just 0.2 % overall. The highest growth rates among the EU Member States during this period were recorded in Poland and Slovakia (both up 91.3 % overall), followed by Romania (up 64.6 %).

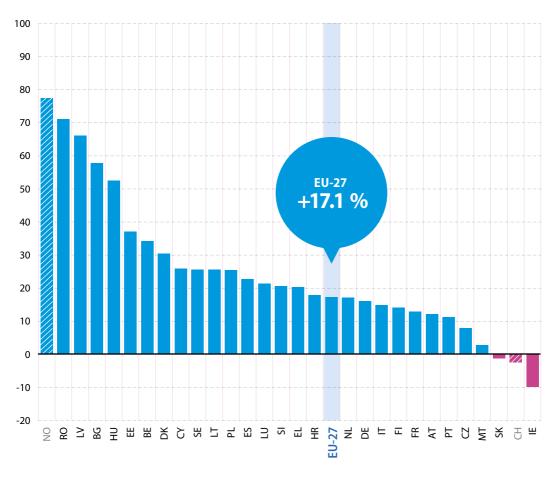
A total of 12 EU Member States recorded lower levels of industrial production in 2020 than in 2005. The largest contractions during this period were in Spain (-25.2 %), followed by Italy (-24.1 %), Luxembourg (-22.5 %), Greece (-21.9 %) and Portugal (-21.7 %).



Note: the index covers NACE Rev. 2 Sections B to D. IE: not available. Source: Eurostat (online data code: sts_inpr_a)

Overall change in industrial producer prices

(%, 2005-2020)



The industrial producer price index is based on selling prices reported by a sample of producers across the EU. This indicator is used to monitor price developments at different stages of industrial processes; changes in producer prices can be an early indicator of inflationary pressures within an economy.

Industrial producer prices in the EU-27 rose at a relatively subdued pace between 2005 and 2020. The overall change in prices during this period was an increase of 17.1 %. They increased in all but two of the EU Member States: the highest industrial producer price increases were recorded in Romania (up 70.9 % overall), Latvia (65.9 %) and Bulgaria (57.7 %). The two decreases were recorded in Slovakia (-1.4 %) and Ireland (- 10.1 %)

Note: the index covers NACE Rev. 2 Sections B to D and NACE Rev. 2 Division 36.

Source: Eurostat (online data code: sts_inpp_a)

Focus on high-tech industry

High-tech industries

(% share of manufacturing value added, 2018)

High-tech industries cover the manufacture of: pharmaceuticals; computer, electronic and optical products; air and spacecraft and related machinery. In 2018, these activities provided work to almost 2.0 million people in the EU-27, while they accounted for 14.1 % of manufacturing value added.

In 2018, high-tech industries accounted for 26.3 % of manufacturing value added in Denmark, while the next largest shares were recorded in Belgium (21.3 %), Malta (18.6 %)

and France (17.4 %). In a majority of the EU Member States less than 10.0 % of added value in manufacturing was derived from high-tech industries. The lowest shares — less than 5.0 % — were recorded in Lithuania, Portugal, Slovakia and Poland.

Note: NL and FI: 2017, DK and SK: 2016, IE, CY, LU and SE: not available

Source: Eurostat (online data code: sbs na sca r2)

DK 26.3

21.3

MT 18.6

FR 17.4

HU 15.0 14.7 SI

EU-27 14.1

DE

NL NO 8.5

10.2

ΑT HR. IT 8.1

ES LV 7.7

EL **C**7

EE

BG RO

PL SK

PT, LT

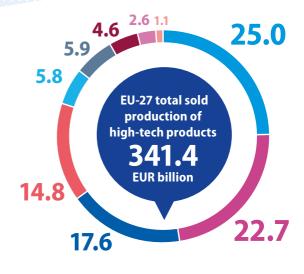
High-tech products

(% share of total sold production of high-tech products, EU-27, 2019)

In 2019, 25 % the EU-27's sold production of high-tech products was made-up of pharmaceuticals, while electronics and telecommunications (22.7 %) also contributed a relatively high proportion. Scientific instruments (17.6 %) and aerospace (14.8 %) were the only other categories to record double-digit shares. At the other end of the range, armaments accounted for just 1.1 % of the sold production of high-tech products in the FU-27.

Note: based on information in value terms. High-tech products are defined according to their level of technological intensity based on R & D intensity (R & D expenditure / total sales) on the basis of the standard international trade classification (SITC).

Source: Eurostat (online data code: DS-066341)





Electronics and telecommunications

Scientific instruments

Aerospace

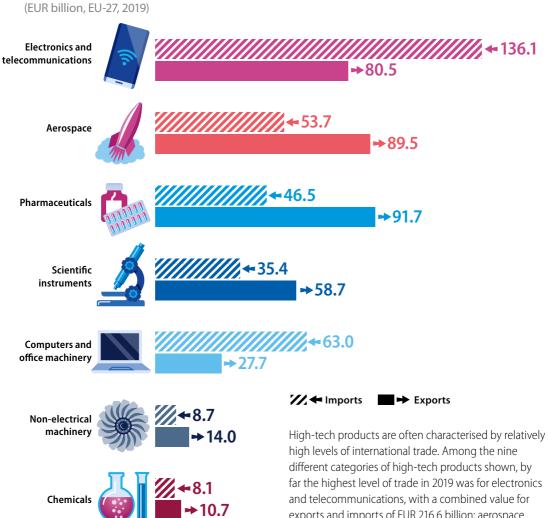
Computers and office machinery Non-electrical machinery

Chemicals

Electrical machinery

Armaments

Trade in high-tech products



far the highest level of trade in 2019 was for electronics exports and imports of EUR 216.6 billion; aerospace (EUR 143.2 billion) and pharmaceuticals (EUR 138.2 billion) also had relatively high levels of total trade.

The EU-27 ran a trade surplus for most categories of high-tech products in 2019. The largest surpluses were recorded for pharmaceuticals (where exports exceeded imports by EUR 45.2 billion), aerospace (EUR 35.8 billion) and scientific instruments (EUR 23.3 billion). By contrast, the EU-27 had sizeable trade deficits for electronics and telecommunications (EUR 55.6 billion) and for computers and office machinery (EUR 35.3 billion).

Note: ranked on total trade (imports + exports). High-tech products are defined according to their level of technological intensity based on R & D intensity (R & D expenditure / total sales) on the basis of the standard international trade classification (SITC).

Source: Eurostat (online data code: DS-018995)

Electrical

machinery

Armaments





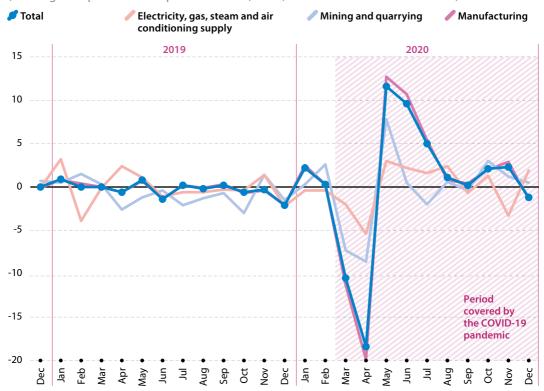
Impact of COVID-19 pandemic



During the early months of the COVID-19 pandemic in spring 2020, virtually all EU Member States implemented containment measures. For industry, these often included restrictions linked to social distancing requirements on the operation of factories.

Industrial production indices

(% change compared with the previous month, EU-27, December 2018-December 2020)



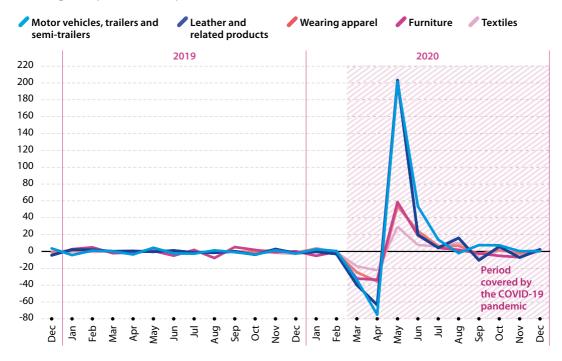
The largest month-on-month decreases in EU-27 industrial output during the first wave of the pandemic were registered in March 2020 (down 10.5 %) and April 2020 (down 18.4 %). These decreases were followed by a rebound in activity, with output increasing in May 2020 (up 11.6 %) and June 2020 (up 9.6 %), while there were smaller monthly increases through to November 2020, followed by a small fall in December 2020 (down 1.2 %).

Note: the total covers mining and quarrying (NACE Rev. 2 Section B), manufacturing (Section C), and electricity, gas, steam and air conditioning supply (Section D).

Source: Eurostat (online data code: sts_inpr_m)

Industrial production indices for the five manufacturing divisions most impacted during the COVID-19 pandemic

(% change compared with the previous month, EU-27, December 2018-December 2020)



Across the EU-27, the industrial activities that suffered the largest impacts during the first wave of the COVID-19 pandemic in March and April 2020 included the manufacture of: motor vehicles, trailers and semi-trailers; leather; wearing apparel; furniture; and textiles. However, output for these activities rebounded strongly in May and June 2020. Comparing the production index level for December 2020 with that of February 2020, summarises the impact of: the large falls in March and April; strong growth in May and June; and subsequent less volatile developments. Output in December 2020 was between 79 % and 98 % of its pre-crisis level in four of the five activities in the figure, while for the manufacture of furniture it was 103 % (therefore, 3 % higher).

The impact of short-term developments on the whole of the EU-27's business economy depends not only on the developments for each detailed activity, but also on their relative weight. For example, the manufacture of motor vehicles, trailers and semitrailers was one of the largest manufacturing activities (3.1 % of EU-27's non-financial business economy value added in 2018). By contrast, the manufacture of leather and related products accounted for just 0.2 % of the total. As such, although these two activities recorded broadly similar developments at the start of the COVID-19 pandemic, the overall impact of the decline (and subsequent rebound) in output for motor vehicle manufacturing was considerably greater, given it was 13.4 times as large — in value added terms — as leather manufacturing.

Note: the five manufacturing divisions most impacted by the COVID-19 pandemic were selected on the basis of the change in EU-27 production indices between February and April 2020.

Source: Eurostat (online data codes: sts_inpr_m and sbs_na_sca_r2)

For more and updated information on industrial activities during the pandemic, please refer to:

